Using Citizen Science and Public Data to Discover New Species Movements

VIRTUAL STUDENT FEDERAL SERVICE

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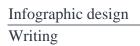|	
Project Title	Using Citizen Science and Public Data to Discover New Species Movements
Project Summary	Heard of biodiversity apps like iNaturalist and eBird? Thousands of regular, smart Americans are recording sightings of birds and flowers and frogs on their phones. We want to see this information get back to the National Park Service so they know what and when species are new.
Country	United States

Project Description

As patterns of land use and climate continue to change in North America, countless species of plants and animals respond by moving into new areas. This can affect the conservation and stewardship of biodiversity, but detecting shifts is an enormous challenge for resource management agencies. With the availability of new technology, citizen scientists may be able to help. Recently, National Park Service hosted centennial "BioBlitz" surveys in which visitors used the iNaturalist app on mobile devices to document species they observed in parks. The resulting datasets are spatially accurate due to global positioning systems (GPS) and biologically accurate after checks by specialists, representing an unprecedented resource for surveying biodiversity. With further processing, integration, and analysis,
these data can be translated into knowledge to guide conservation and management and permit early detection of species' range shifts in response to changes in climate and land use.

We're looking for interns to help us work with packaging the results of our data analysis to share with national parks around the country, so they can use the information to improve their management (e.g., of invasive species) and inform their publics. The work will involve some creativity and reports will be produced that the interns can get authorship on, given that they meet the time and effort requested.

Required Skills or Interests

Skill(s)

Data analysis

Data visualization

Editing and proofreading

Educational design

Additional Information

None

Language Requirements

None